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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Divisional Patent Application of  
U.S. Application No. 08/964,888  
Filed: November 5, 1997

Hiroyuki KAWAI et al.

Application No.: To Be Assigned

Filed: September 22, 2000

For: SQUARE ROOT EXTRACTION  
CIRCUIT AND FLOATING-POINT  
SQUARE ROOT EXTRACTION  
DEVICE

Group Art Unit: Unknown

Examiner: Unknown



**INFORMATION DISCLOSURE STATEMENT  
TRANSMITTAL LETTER**

Assistant Commissioner for Patents  
Washington, D.C. 20231

Sir:

Enclosed is an Information Disclosure Statement and accompanying form PTO-1449 for the above-identified patent application.

- ☒ No additional fee for submission of an IDS is required.
- ☐ The fee of \$240.00 (126) as set forth in 37 C.F.R. § 1.17(p) is also enclosed.
- ☐ A certification under 37 C.F.R. § 1.97(e) is also enclosed.
- ☐ A certification under 37 C.F.R. § 1.97(e), a petition requesting consideration of the information disclosure statement, and the petition fee of \$130.00 (122) as set forth in 37 C.F.R. § 1.17(i) are also enclosed.
- ☐ Charge \$\_\_\_\_\_ to Deposit Account No. 02-4800 for the fee due.
- ☐ A check in the amount of \$\_\_\_\_\_ is enclosed for the fee due.

The Commissioner is hereby authorized to charge any appropriate fees under 37 C.F.R. §§ 1.16, 1.17 and 1.21 that may be required by this paper, and to credit any overpayment, to Deposit Account No. 02-4800. This paper is submitted in duplicate.

Respectfully submitted,

BURNS, DOANE, SWECKER & MATHIS, L.L.P.

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By:

Charles F. Wieland III  
Registration No. 33,096

Date: September 22, 2000

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**INFORMATION DISCLOSURE STATEMENT**

Assistant Commissioner for Patents  
Washington, D.C. 20231

Sir:

In accordance with the duty of disclosure as set forth in 37 C.F.R. § 1.56, Applicants hereby submit the following information in conformance with 37 C.F.R. §§ 1.97 and 1.98. Pursuant to 37 C.F.R. § 1.98, a copy of each of the documents cited is enclosed.

U.S. Patent No. 5,430,669 to Chen et al.  
Date: July 4, 1995

U.S. Patent No. 5,331,586 to Kitora  
Date: July 19, 1994

U.S. Patent No. 5,128,891 to Lynch et al.  
Date: July 7, 1992

U.S. Patent No. 4,748,581 to DeTroye  
Date: May 31, 1988

Japanese Patent Publication No. 4-257024  
Published: September 11, 1992 (English Abstract Attached)

Kai Hwang, "Computer High-Speed Operation System," Kindai Kagaku sha Co., LTD., September 1, 1980, pp. 357-363, 42-43. (English Language Abstract Attached)

To assist the Examiner, the documents are listed on the attached form PTO-1449. It is respectfully requested that an Examiner initialed copy of this form be returned to the undersigned.

Respectfully submitted,

BURNS, DOANE, SWECKER & MATHIS, L.L.P.

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(1) Japanese Patent Laying Open Gazette No. 4-257024:

"Square Root Extractor"

A square root extractor which is characterized in that first calculating elements consisted of an adder, a multiplexer, etc. and second calculating elements consisted of an incrementer, an adder, etc. are connected serially to plural steps in accordance with bit length of extracted square roots and extracting numbers.

(2) "Computer High-speed Operation System"

A square root extraction circuit employing a tree structure which determines each subtrahend used in non-recovery type square root extraction and also employing a Controlled Add-Subtract (CAS) cell.